



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,005	12/14/2004	Masashi Sugiyama	034145.002	6706
441	7590	07/05/2007	EXAMINER	
SMITH, GAMBRELL & RUSSELL 1850 M STREET, N.W., SUITE 800 WASHINGTON, DC 20036			WOOD, ELIZABETH D	
ART UNIT		PAPER NUMBER		
1755				
MAIL DATE		DELIVERY MODE		
07/05/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/518,005	SUGIYAMA ET AL.	
Examiner	Art Unit		
Elizabeth D. Wood	1755		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 April 2007.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1,3 and 5 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1, 3 and 5 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

***Specification***

The examiner has not checked the specification to the extent necessary to determine the presence of **all** possible minor errors (grammatical, typographical and idiomatic). Cooperation of the applicant(s) is requested in correcting any errors of which applicant(s) may become aware of in the specification, in the claims and in any future amendment(s) that applicant(s) may file.

Applicant(s) is also requested to complete the status of any copending applications referred to in the specification by their Attorney Docket Number or Application Serial Number, **if any**.

The status of the parent application(s) and/or any other application(s) cross-referenced to this application, **if any**, should be updated in a timely manner.

***Claim Rejections - 35 USC § 102***

Applicant's comments regarding the rejection of claims 1 and 2 under 35 USC 102(b) in view of Wadlinger et al. have been found convincing and the rejection is hereby withdrawn. However, the following new rejection is applicable:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,308,069 to Wadlinger et al.

The amended claims recite a composition comprising a proton type beta zeolite, which can have a silica:alumina ratio of 20-70.

Wadlinger et al. teach the known material, zeolite beta in hydrogen form and having a silica:alumina ratio between 10-200, which disclosure is considered to render the instantly claimed subject matter obvious to the skilled artisan. See columns 3, 5 and 7:

Applicant comments that the silica to alumina ratio of the reaction mixture is 10-200, but this is not considered relevant. The final silica to alumina ratio of the zeolite material will still be "high", i.e. over 10, which reads directly on the instant claims. The claimed range is completely embraced by the reference disclosure, and absent some convincing showing of evidence of unexpected results that is strictly commensurate with the claims under examination, would predictably be expected to result in a functional catalyst.

Applicant argues that the Wadlinger disclosure of zeolite beta is "broad" because it is taught that the sodium cations can be replaced by many other cations. However, it is well settled that there is nothing unobvious in the selection of one specifically disclosed example from among many, as long as the results obtained are expected and predictable. The selection of appropriate ions and appropriate ratios of silica to alumina

for zeolitic materials constitute an exercise within the disclosure of the prior art that the skilled artisan is expected to conduct depending on the intended use of the final material.

Claims 3 and 5 remain rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,374,410 to Grasselli et al. for the reasons set forth in the previous office action.

***Response to Arguments***

Applicant's arguments filed April 5, 2007 with respect to the rejection over Grasselli et al. have been fully considered but they are not persuasive.

Applicant argues that Grasselli et al. recite the silica alumina ratios only for ZSM materials in column 4. The examiner disagrees. In the very same paragraph, applicant recite "Also included herein is Zeolite Beta". The examiner fails to see how applicant can separate this portion of the paragraph from the remaining discussion of silica to alumina ratios of 12:1 and up.

Applicant argues that the claim language of "consisting of" excludes the substrate of Grasselli et al. This is not convincing. The claim requires the process to employ a catalyst consisting of proton zeolite beta. The reference teaches a process employing a catalyst that consists of proton zeolite beta. A substrate, support or carrier material need not be catalytically active and need not be considered part of the catalyst. Accordingly, applicant's language would not exclude this component.

***Conclusion***

Applicants are advised that any evidence to be provided under 37 CFR 1.131 or 1.132 and any amendments to the claims and specification should be submitted prior to final rejection to be considered timely. It is anticipated that the next office action will be a final rejection.

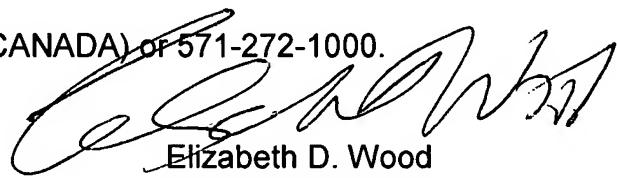
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth D. Wood whose telephone number is 571-272-1377. The examiner can normally be reached on M-F, 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 1755

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Elizabeth D. Wood  
Primary Examiner  
Art Unit 1755

EDW